

What is claimed is:

1. An appearance processing method comprising:
designing a reference appearance for designing a set shape as a
5 theoretical value;
producing a specimen;
comparing the reference appearance with the specimen and thus setting a
deviation region; and
performing ion beam milling for milling the deviation region of the
10 specimen by ion beam.
2. The method of claim 1, wherein the ion beam milling is performed
by milling the specimen by controlling an incidence angle for ion beam and milling
time.
- 15 3. The method of claim 1, further comprising a step of comparing the
milling-processed specimen with the reference appearance after the ion beam
milling thus to obtain a deviation and milling the deviation region repeatedly thus to
make the specimen consist with the reference appearance.
- 20 4. The method of claim 1, wherein the specimen is formed as a
shape that can be repeatedly and massively produced.
5. The method of claim 1, wherein a designed reference appearance
25 includes a concave surface, a convex surface, or a plane in the step of designing

the reference appearance.

6. The method of claim 1, wherein the specimen is a transparent material.

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7. The method of claim 1, wherein the specimen is a coupling of hetero material.

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8. An aspheric lens fabricating method comprising:

designing a desired aspheric surface;

producing a basic lens of an arbitrary shape;

comparing the desired aspheric surface with the basic lens and thus setting a deviation region;

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performing ion beam milling for milling the deviation region of the basic lens by ion beam; and

processing a shape of the basic lens with comparison with the desired aspheric shape by the ion beam milling and making the basic lens consist with the desired aspheric shape, thereby completing.

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9. The method of claim 8, wherein the ion beam milling is performed by milling the basic lens by controlling an incidence angle for ion beam and milling time.

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10. The method of claim 8, wherein the basic lens is an ideal spherical shape than can be massively produced easily.

11. The method of claim 8, wherein the desired aspheric surface has a parabolic shape.

12. The method of claim 8, wherein the desired aspheric surface has
5 an elliptical shape.

13. The method of claim 8, wherein comparing the basic lens processed by ion beam milling with the desired aspheric surface is performed by a stylus profiling method in the step of completing.

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14. The method of claim 8, wherein comparing the basic lens processed by ion beam milling with the desired aspheric surface is performed by an interferometer in the step of completing.